

REMARKS

Upon entry of the present amendment, claims 1, 7, 8, 14 and 20 will have been amended. Accordingly, claims 1-4 and 6-20 are pending in the present application.

In view of the hereincontained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections set forth in the above-mentioned Official Action. Such action is respectfully requested and is now believed to be appropriate and proper.

Initially, Applicant wishes to respectfully thank the Examiner for considering the documents cited in the Information Disclosure Statement of December 12, 2006, by the return of the signed and initialed PTO-1449 Form attached to the above-noted Information Disclosure Statement.

In the outstanding Official Action, the Examiner rejected claim 20 under 35 U.S.C. § 112, first paragraph. The Examiner asserted that the claim fails to comply with the written description requirement. In particular, the Examiner asserted that the claim contains new subject matter which was not described in the specification in such a way as to reasonably convey, to one skilled in the relevant art, that the inventor, at the time the application was filed, had possession of the claimed invention. The Examiner made express reference to the computer readable medium.

Applicant respectfully traverses the above-noted rejection and submits that it is inappropriate with respect to the claim 20 presently pending in the application. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 20 as failing to comply with the written description requirement of 35 U.S.C. § 112, first paragraph.

In particular, Applicant respectfully submits that each of the devices described in Applicant's specification includes a computer readable medium. In this regard, Applicant notes

that the memory device 10, as described at the paragraph bridging pages 10 and 11 of the instant specification, is disclosed as provided with a memory 41 that stores count content downloaded from a server and is composed of “for example, flash memory”. A memory controller 42 with tamper-resistance controls data read/write in memory 41. The memory controller 42 is provided with a CPU that controls the operation of the memory device as well as a RAM 44 and a ROM 45. Moreover, internal non-volatile memory 46 is provided as, for example, an EEPROM.

Additionally, as described in the paragraph starting on page 11, line 7, the device (cellular phone) 20 includes a CPU that controls operations as well as a ROM that stores a program for specifying the operation of the CPU as well as an EEPROM in which data is written to generate a key in a challenge response scheme.

Accordingly, it is respectfully submitted that Applicant’s original disclosure provides clear, specific and unambiguous support for the recitation of a computer readable medium in Applicant’s claim 20. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 20 as failing to meet the written description requirement of 35 U.S.C. § 112, first paragraph.

In the outstanding Official Action, the Examiner further rejected claims 1, 7, 8, 14 and 20 under 35 U.S.C. § 112, second paragraph, as being indefinite. In particular, the Examiner asserted that the claims fail to particularly point out and distinctively claim the subject matter which Applicant regards as the invention. Regarding each of these claims, the Examiner asserted that the recitation “user identification information” is indefinite due to a lack of sufficient antecedent basis for this limitation in the claim.

Applicant respectfully traverses the above rejection and submits that it is inappropriate. In particular, the recitation queried by the Examiner merely defines the third authentication

information as user identification information. It is not clear what further antecedent basis for this term is necessary to be recited in the claim.

Nevertheless, and in order to satisfy the Examiner's concerns regarding this term, Applicant has amended the claims to now define the third authentication information as "comprising secret information input by a user". It is respectfully submitted that this term, as a recitation of the claim, provides adequate antecedent basis for itself and is further more particular descriptive of Applicant's invention.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of any of the claims in the present application under 35 U.S.C. § 112, second paragraph.

In the outstanding Official Action, the Examiner rejected claims 1-20 under 35 U.S.C. § 102(b) as being anticipated by RAITH (U.S. Patent 5,241,598). Applicant respectfully traverses the above rejection.

As previously noted, RAITH relates to a rolling key resynchronization in a cellular verification validation system. According to a feature of RAITH, the network rolling key input is set to a selected value and the mobile station is commanded to set the mobile station rolling key input to the same selected value. The mobile station will then set the mobile station rolling key input to the selected value in response to a command from the network.

However, RAITH does not disclose the combination of features recited in Applicant's claims. In particular, in the last paragraph of page 5 of the outstanding Official Action, the Examiner asserts that the third authentication information comprises MIN (mobile identification number). However, this is not what Applicant's claims recite. In this regard, Applicant respectfully directs the Examiner's attention to column 15, starting at line 63, wherein RAITH

defines the mobile identification number as derived “from the mobile station’s 10-digit directory telephone number” (area code and telephone number”).

In direct contrast, Applicant’s claim 1 (as a nonlimiting example) recites the third authentication information as comprising secret information input by a user. Clearly, the mobile identification number is neither secret nor input by a user, but is defined or derived from the mobile station’s telephone number. Thus, for this reason alone, it is respectfully submitted that Applicant’s claims are clearly patentable over the RAITH disclosure.

In addition, RAITH discloses generating a RAND response (random challenge number) based upon a secret key that is known only to the mobile station and the network and other inputs including, for example, the factory set electronic serial number which uniquely identifies the mobile station as well as the telephone number of the mobile station (i.e., the MIN of the mobile station). As shown in Fig. 4 of RAITH, a secret key (A-key) is input to an authorization processor together with the manufacturing number ESN.

However, RAITH does not disclose generating a secret key in a device not having a secure area. Further, RAITH does not disclose generating a secret key based upon, *inter alia*, a secret information input by a user from externally of the device as recited in Applicant’s claims. For this additional reason, Applicant respectfully submits that the present claims are patentable over RAITH.

Yet further, in setting forth the rejection, the Examiner asserts that the features recited in the last paragraph of, e.g., claim 1, is disclosed in RAITH at column 18, lines 49 through column 19, line 14. It is respectfully submitted that this is incorrect. In particular, in this portion of the disclosure, RAITH discusses bilateral authorization between a network (base station) and a mobile terminal and sending a bilateral response message including an internally generated RESP from the mobile station to the network only when a RESPBIS, obtained from the network

by the mobile station, matches an internally generated RESPBIS. In this regard, the Examiner's attention is respectfully directed to the sentence bridging columns 18 and 19 of RAITH.

However, such bilateral authentication as disclosed by RAITH is performed only between the mobile station and the network. In other words, RAITH does not disclose "a device that performs mutual authorization with a first device" which is a device that is distinct from the second recited device of the present invention. In particular, RAITH does not disclose that "when the first device does not hold the first authentication information, a device that performs mutual authentication with the first device acquires the fourth authentication information from the second device, and sets the first device for the first authentication information as an initial setting" as explicitly recited in claim 1.

Accordingly, for each of the above-noted reasons and certainly for all of the above-noted reasons, Applicant respectfully submits that Applicant's claims 1-4 and 6-20 are clearly patentable over the RAITH disclosure. No proper interpretation of the RAITH disclosure teaches, discloses nor renders unpatentable any of the combinations of features recited in Applicant's independent claims. Moreover, RAITH does not disclose the various additional features recited in Applicant's dependent claims.

Accordingly, Applicant respectfully requests reconsideration of each of the outstanding rejections together with an indication of the allowability of all the claims pending in the present application, in due course. Such action is respectfully requested and is now believed to be appropriate and proper.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so. Applicant has amended the claims to clarify the features of Applicant's invention without raising new issues that would require further consideration or search. Applicant has provided a clear basis for the recitation of "computer readable medium" in claim 20 by reference to the original specification of the present application. Applicant has additionally amended the claims to overcome the Examiner's rejection under 35 U.S.C. § 112, second paragraph, while also traversing the rejection.

With regard to the rejection of the claims under 35 U.S.C. § 102, Applicant has discussed the disclosure of the reference relied upon and has pointed out the shortcomings thereof with respect to the recitations of Applicant's claims. Applicant has additionally discussed the present invention and has pointed out the shortcomings of the reference with respect thereto making specific reference to various portions of the RAITH disclosure. Accordingly, Applicant has provided a clear evidentiary basis supporting the patentability of all the claims in the present application and respectfully requests an indication to such effect, in due course.

Applicant notes that the present application is subject to final rejection and, thus, Applicant is not entitled to amend the present application as a matter of right. Nevertheless, Applicant respectfully submits that the amendments to the present claims do not raise new issues requiring further consideration or search but merely respond to the Examiner's rejection under 35 U.S.C. § 112 and clarify the features of Applicant's invention. Accordingly, in accordance with the provisions of 37 C.F.R. § 1.116, Applicant submits that the present amendment is appropriate for entry and request such entry.

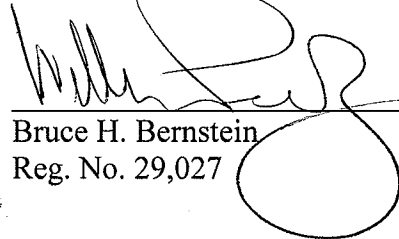
Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be

considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should an extension of time be necessary to maintain the pendency of this application, including any extensions of time required to place the application in condition for allowance by an Examiner's Amendment, the Commissioner is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
Atsushi MINEMURA



Bruce H. Bernstein
Reg. No. 29,027

William Pieprz
Reg. No. 33,630

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 2019
(703) 716-1191